

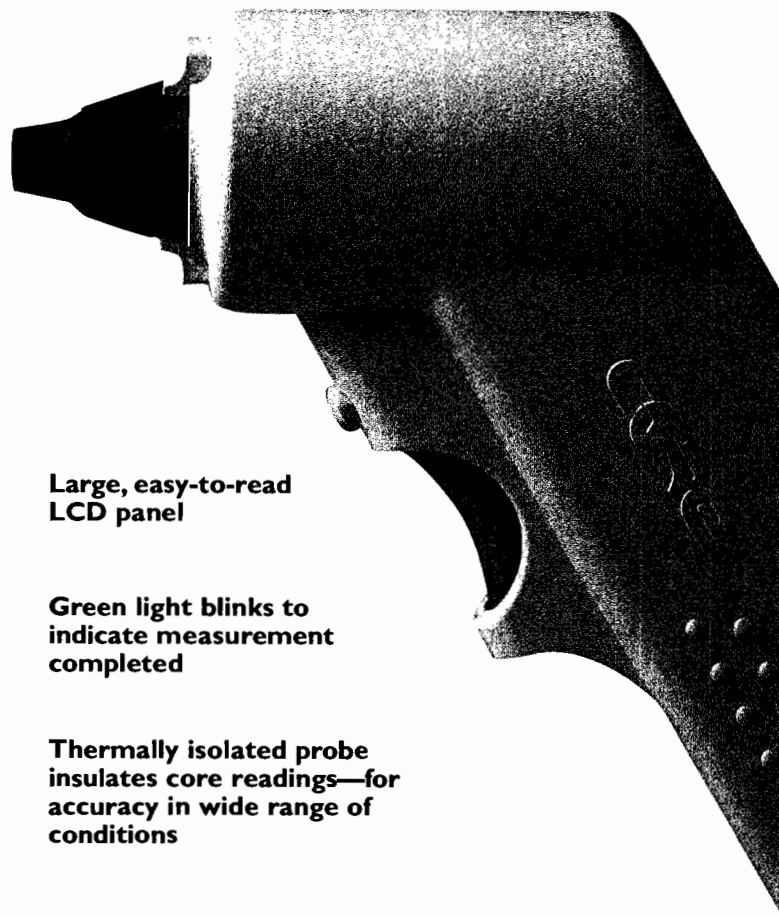
ESTTA Tracking number: **ESTTA288854**

Filing date: **06/09/2009**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	91177234
Party	Plaintiff Cardinal Health 303, Inc.
Correspondence Address	Joseph R. Dreitler Bricker & Eckler LLP 100 S. Third Street Columbus, OH 43215-4291 UNITED STATES mtrue@bricker.com
Submission	Plaintiff's Notice of Reliance
Filer's Name	Mary R. True
Filer's e-mail	trademarks@bricker.com
Signature	/Mary R. True/
Date	06/09/2009
Attachments	Burns Notice_pdf (3).pdf ( 25 pages )(3355467 bytes )

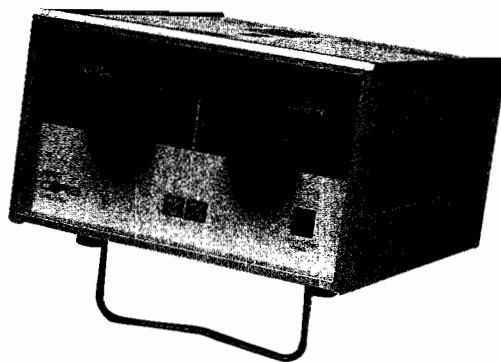
<b>Measurement Range</b>	77°F to 110°F 25°C to 43.3°C
<b>Accuracy</b>	± 0.2°F (± 0.1°C) Meets ASTM specification No. E1112-86, at an ambient temperature range of 65°F to 90°F 18.3°C to 32.2°C
<b>Battery</b>	Approximately 8,000 readings on one 9-volt alkaline battery under normal use
<b>Size</b>	7.5 x 1.5 x 3 in. 19.05 x 3.81 x 7.62 cm
<b>Weight</b>	8 ounces with battery 266 grams
<b>Case</b>	Durable, impact-resistant plastic
<b>Probe Cover</b>	IVAC Model P90 Probe Covers
<b>Humidity</b>	15% to 90% Non-condensing
<b>Storage Temperature</b>	-32°F to 140°F -35°C to 60°C
<b>Anti-Theft Feature</b>	40 measurements are available before a return to base is required
<b>Information Display</b>	Core, Replace Cover, Return to Base (Anti-Theft Feature), Batt Low, Replace Batt, Cal (Calibrate Instrument), Error (Numbered Error Messages), Lo A (Low Ambient), Hi A (High Ambient), Lo (Low Temperature), Hi (High Temperature)



**Large, easy-to-read LCD panel**

**Green light blinks to indicate measurement completed**

**Thermally isolated probe insulates core readings—for accuracy in wide range of conditions**



**For improved efficiency and reliability, the CORE•CHECK Calibrator Model 9000 lets you test CORE•CHECK thermometers right on the spot – and, if needed, perform calibrations within 60 seconds.**

The CORE•CHECK thermometer offers the utmost confidence in temperature readings, while saving you time and money.

Talk to the people who know best how ALARIS Medical's full family of patient monitoring systems can help you. Contact your ALARIS™ Medical Account Consultant or call 1-800-482-4822. In Canada call 1-800-268-4485 (Eastern) or 1-800-513-2254 (Western).



**ALARIS™**  
MEDICAL SYSTEMS

*Bringing Together the Best  
of IMED® and IVAC®*

ALARIS Medical Systems, Inc.  
WORLDWIDE HEADQUARTERS  
10221 WATERIDGE CIRCLE  
SAN DIEGO, CALIFORNIA 92121-2733  
FAX: (619) 458-7760  
CUSTOMER SERVICE: (800) 482-4822

## PRIMARY BENEFITS

### ■ Ease of Use

*Simply connect the ReadyMED pump, open the clamp and the infusion is delivered accurately and safely.*

### ■ Simple and Convenient

*No need to monitor complex electronic or mechanical pump systems or utilize clumsy poles for gravity infusions.*

### ■ Reliable and Accurate

*For over 5 years, manufactured to perform by ALARIS Medical Systems, a leader in infusion delivery systems.*

### ■ Supports Active Lifestyle

*Designed to maximize freedom, the ReadyMED system can be carried in a pocket, or in a waist pouch for easy ambulation.*

### ■ Safer than Gravity Delivery Infusions

*No poles, gravity, or drop counting needed, the ReadyMED system requires minimal patient or caregiver training.*

### ■ Latex-Free

*The ReadyMED system fluid pathway is completely latex-free, eliminating increasing concerns about latex intolerance.*

The ReadyMED® system is a single-use, fixed-rate, positive-pressure system for the delivery of antibiotics and antivirals. Ideal for alternate

site infusions, the

ReadyMED®

elastomeric pump is

the infusion system

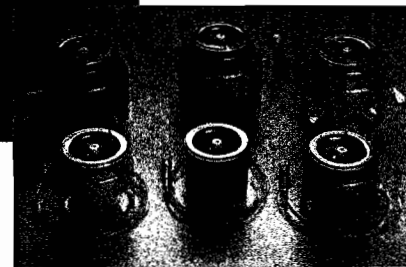
of choice in--

supporting the

active lifestyle of

patients in the

homecare setting.



**ALARIS™**  
MEDICAL SYSTEMS

*Improving and Extending the  
Quality of Human Life™*

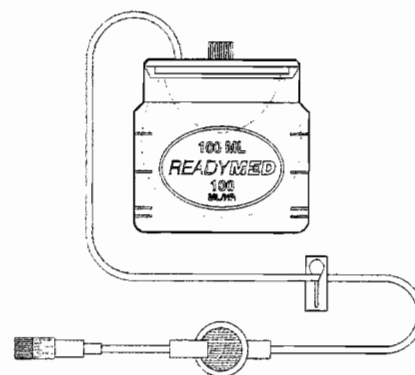
## READYMED® APPLICATIONS

Available in a full range of infusion rates and fill volumes, the ReadyMED® system can be utilized to administer a wide variety of medications including:

- antibiotics
- antivirals
- applicable for adult and pediatric infusions

## READYMED® FEATURES

- Color coding for easy identification of different flow rates/models
- Low filling pressure; accepts any syringe or dispensing pump; no needles required
- Multiple membrane layers enhance system integrity and quality
- Pre-attached, self-priming tubing
- Air-eliminating/particulate filter
- Power module creates consistent output pressure
- Flow restrictor provides reliable fixed rate
- Visual indication of infusion progress and completion of dose



## READYMED® SPECIFICATIONS

**FILTER:** 1.2 MICRON PARTICULATE

.02 MICRON AIR ELIMINATING VENT

**INFUSION ACCURACY:** +/- 15%

**RESIDUAL VOLUME:** 1.6 mL

**PRE-ATTACHED TUBING LENGTH:** 48" (122CM) MICROBORE

REORDER NUMBER	R050050	R100100	R100200	R250167	R250100	R250050
Flow Rate	50 mL/hr	100 mL/hr	200 mL/hr	167 mL/hr	100 mL/hr	50 mL/hr
Fill Volume	50 mL	100 mL	100 mL	250 mL	250 mL	250 mL
Maximum Capacity	55 mL	105 mL	105 mL	260 mL	260 mL	260 mL
Approximate Infusion Time	1 hour	1 hour	0.5 hours	1.5 hours	2.5 hours	5 hours
Units Per Tray	6	6	6	3	3	3
Units Per Case	24	24	24	12	12	12
Color Coding	Purple	Clear	Blue	Green	Clear	Purple

Talk to the people who know best how ALARIS Medical Systems™ can help you: contact your ALARIS Medical Systems™ Account Consultant or call 1-800-482-4822. In Canada call 1-800-387-8309.



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WORLDWIDE HEADQUARTERS  
10221 WATERIDGE CIRCLE  
SAN DIEGO, CALIFORNIA 92121-2772  
FAX: (858) 458-7760  
CUSTOMER SERVICE: (800) 482-4822

WEBSITE: [WWW.ALARISMED.COM](http://WWW.ALARISMED.COM)



ALARIS<sup>®</sup>

MEDICAL SYSTEMS

*Improving and Extending the  
Quality of Human Life™*

V I T A L   S I G N S   M O N I T O R

# Vital•Check<sup>®</sup> 4500 SERIES

*... monitors noninvasive blood  
pressure and temperature  
for all your patients from  
neonates to geriatrics in one small,  
powerful, vital signs monitor*



*Small Compact Monitor*

*Diversa•Cuf<sup>®</sup> NIBP*

*Electronic Temperature*

*Automatic Memory*

*Printer Option*

T H E   C H O I C E   F O R   S A F E T Y



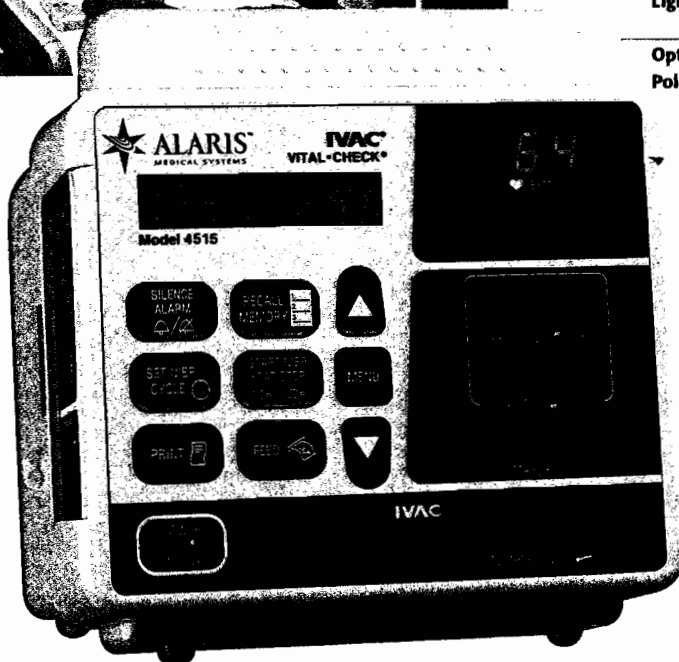
**ALARIS**<sup>®</sup>  
MEDICAL SYSTEMS

# Vital•Check<sup>®</sup>

VITAL SIGNS MONITOR 4500 SERIES

## FEATURE HIGHLIGHTS

- **Small, Compact Monitor**
- **Diversa•Cuf<sup>®</sup> NIBP**  
Patented NIBP technology rapidly reads on inflation minimizing patient discomfort.
- **Electronic Temperature**  
Fast, accurate temperature readings with two temperature modes for use in any care area.
- **Automatic Memory**  
One touch memory access.
- **Printer** (optional)  
Memory printout for comprehensive documentation.
- **Accessories**  
The VITAL•CHECK<sup>®</sup> Vital Signs Measurement System provides a wide variety of monitoring accessories from neonate to large adult.



### Operating Modes

- Adult
- Neonatal
- Manual

### Automatic Measurement Cycles

- Eleven selectable Intervals
- Plus "STAT" Mode

### LED Displays For Ease Of Reading In All Lighting Environments

### Selectable Audio Volumes

### Light Weight, Easily Transportable

Optional Roll Stand Model 1094 or Pole Mount Model 1295.

Talk to the people who know best how ALARIS Medical Systems can help you: contact your ALARIS Medical Systems Account Consultant or call 1-800-482-4822. In Canada call 1-800-387-8309.

## SPECIFICATIONS - VITAL•CHECK<sup>®</sup> 4500 SERIES

### ACCURACY:

#### NIBP:

Greater of +/- 2% or 2mmHg over full range

#### Heart rate/Pulse rate:

+/- 1 bpm

#### Temperature:

+/- 0.2° F (0.1° C)  
(When tested in a calibrated water bath in monitor mode)

### DIMENSIONS:

Width: 6 inches  
Height: 7 inches  
Depth: 6 inches

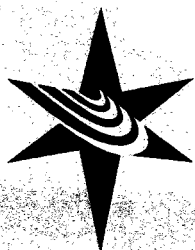
### BATTERY LIFE:

Rechargeable Lead Acid. 6.5 hours  
(with NIBP every 15 minutes)

### POWER REQUIREMENT:

110 to 120V, 50/60 Hz





# ALARIS<sup>®</sup>

MEDICAL SYSTEMS

*Improving and Extending the  
Quality of Human Life™*

## NEEDLE-FREE IV GRAVITY ADMINISTRATION SETS

*The SmartSite<sup>®</sup>  
needle-free IV Gravity  
Sets allow you to  
standardize on one  
integrated needle-free  
system throughout  
your facility.*

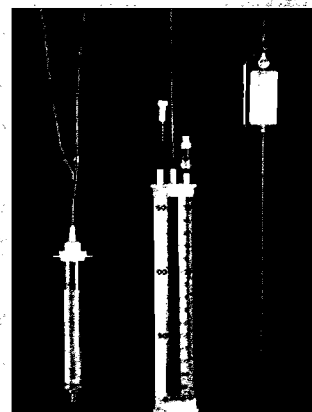
*Diverse Infusion  
Applications*

*Needle-Free  
Compliance*

*Lowest System Cost*

*Easy to Use*

*Latex Free*



... THE CHOICE FOR SAFETY

## PRIMARY BENEFITS

- **Diverse Infusion Applications:** Blood, Filter, Minidrip, Automatic Secondary.
- **Needle-Free Compliance:** Because the SmartSite<sup>®</sup> needle-free valve can only be activated with a standard luer, it eliminates the use of needles.
- **Lowest System Cost:** Reduce needle-free costs by up to 30% by eliminating the need for cannulas and caps.
- **Easy to Use:** Simply swab, attach any standard luer and detach. That's it!
- **Latex Free:** Because the SmartSite<sup>®</sup> system is latex free, it can be safer for the patient and the caregiver.

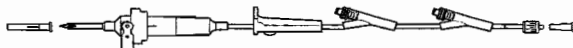
### 42080E



Drops per ml

Non-Vented, Blood Set with 200m Filter and 1 SmartSite<sup>®</sup> Needle-Free Valve Port. **Length:** 104". **Approx. Prime Volume:** 32ml.

### 42133E



Drops per ml

Vented/Non-Vented Minidrip Set with 2 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

### 42173E



Drops per ml

Vented/Non-Vented Infusion Set with 1 SmartSite<sup>®</sup> Needle-Free Valve Port. **Length:** 104". **Approx. Prime Volume:** 17ml.

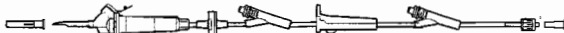
### 42193E



Drops per ml

Vented/Non-Vented Infusion Set with Check Valve and 1 SmartSite<sup>®</sup> Needle-Free Valve Port. **Length:** 104". **Approx. Prime Volume:** 17ml.

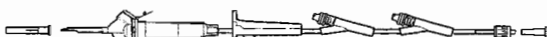
### 42233E



Drops per ml

Vented/Non-Vented Minidrip Set with Check Valve and 2 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

### 42273E



Drops per ml

Vented/Non-Vented Infusion Set with 2 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

### 42293E



Drops per ml

Vented/Non-Vented Infusion Set with Check Valve and 2 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

### 42433E



Drops per ml

Vented/Non-Vented Minidrip Set with Check Valve and 3 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

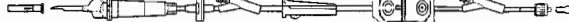
### 42493E



Drops per ml

Vented/Non-Vented Infusion Set with Check Valve and 3 SmartSite<sup>®</sup> Needle-Free Valve Ports. **Length:** 104". **Approx. Prime Volume:** 17ml.

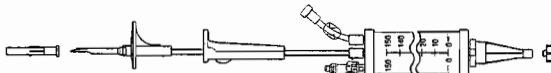
### 42933E



Drops per ml

Vented/Non-Vented Infusion Set with Check Valve and 2 SmartSite<sup>®</sup> Needle-Free Valve Ports and 0.2m Filter. **Length:** 104". **Approx. Prime Volume:** 22ml.

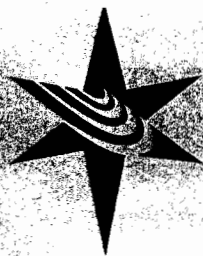
### 82113E



Vented/Non-Vented 150ml Add-On Burette with 1 SmartSite<sup>®</sup> Needle-Free Valve Port. **Length:** 17".

**Looking for more ways to go needle-free?** call 1-800-482-4822 to learn more about the SmartSite<sup>®</sup> Needle-Free System. In Canada call 1-800-387-8309.





ALARIS MED  
**ALARIS<sup>®</sup>**  
MEDICAL SYSTEMS

*Improving and Extending the  
Quality of Human Life<sup>™</sup>*

## DUAL CHANNEL INFUSION SYSTEM

# Gemini PC-2TX<sup>®</sup>

*... designed to help  
the clinician improve  
efficiency and provide the  
greatest value of any dual  
channel infusion system.*



Dual-Channel Delivery

Backlit Center Display

Drug Dose Calculator

Infusion Rate  
Profiling Options

Pressure History

Panel Lock

... THE CHOICE FOR SAFETY



Gemini Dual-Channel

The Gemini Family of infusion pumps are designed for use with the Gemini series of administration sets. This product line offers a wide variety of needle-free and standard IV sets, each featuring the patented Flo-Stop® Device which provides set-based protection against accidental IV free-flow.

#### PROGRAMMABLE FEATURES

- Drug Calculation, Delayed Start, Multi-Dose
- Anesthesia Mode
- Alarm Audio Profiles
- Pump/Controller/Selectable Pressure Mode
- Configurable Maximum Rate
- Secondary Mode
- Panel Lock
- Computer Monitor Capability
- Maintenance Mode

#### FEATURE HIGHLIGHTS

##### Dual Rate Programming

Provides sequential delivery of infusion programs and automatically switches to primary infusion upon completion of secondary.



##### Drug Dose Calculator

Eliminates complex bedside calculations thereby saving time and reducing the chance of calculation errors.

##### Panel Lock

Added safety feature that prevents inadvertent changes to infusion program.

##### Backlit Center Display

Large visual area with adjustable display contrast, facilitates easy programming.



##### Rapid Rate, On-Line Titration

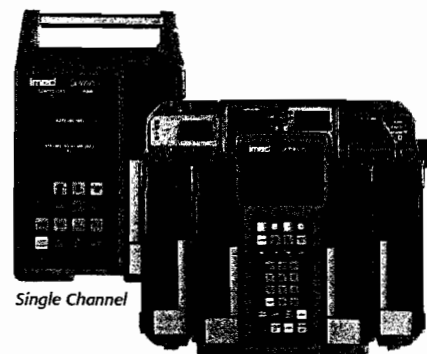
Enables rapid rate adjustments without interrupting flow.

##### Pressure History

Graphically displays pressure trends for last two hours.

##### Infusion Rate Profiling Options

A range of infusion programs can be selected to save nursing time and meet sophisticated administration requirements including: Programmable Start Time, Multi-Dose and Volume/Time Dosing.



Single Channel

Four Channel

**Flow Rate Range** — 0.1 mL/hr to 999 mL/hr (Pump Mode), 0.1 mL/hr to 500 mL/hr (Controller Delivery Mode)

**Volume to be infused** — 0.1 to 9999 mL

**KVO Flow Rate** — 1 mL/hr or set rate if less than 1 mL/hr

**Dimensions:** Width 11.8 in.  
Height 10.8 in.  
Depth 7.3 in.  
Weight 18.0 lbs.

**Internal Battery** — Sealed Lead Acid

**Battery Capacity** — Approximately 7.5 hours with two channels operating at 125 mL/hr

**Power Requirements** — 90-132V AC, 0.6 A, 50-60 Hz

Talk to the people who know best how ALARIS Medical Systems full family of infusion systems can help you. Contact your ALARIS Medical Systems Account Consultant or call 1-800-482-4822. In Canada call 1-800-387-8309.

Build consensus for IV therapy best practices to achieve optimal safety at the bedside with the Guardrails<sup>®</sup> Safety Software.

---

**Maximum Support for Data Set Development**

- Leverages best practice experience to support data set development
- Expedites implementation of new safety processes and technology
- Trains you for ongoing management of your data set.

---

**SMART Services**

ProjectSMART<sup>SM</sup>

PharmSMART<sup>SM</sup>

TechSMART<sup>SM</sup>

NurseSMART<sup>SM</sup>

SMARTPractice<sup>SM</sup>



ALARIS Medical Systems offers a portfolio of consulting services that provide clinical and technical support and guidance to your hospital.

# Leverages Best Practice Experience to Support Data Set Development

In partnership with your safety team, the PharmSMART<sup>SM</sup> Consultants will facilitate customization of your hospital's data set. Drawing on their specialized expertise, and ALARIS Medical Systems' proprietary data, the PharmSMART<sup>SM</sup> Consultants will help you reach consensus among doctors, clinicians, pharmacists, administrators and other key leaders regarding best practice IV protocols.



**1**  
Gather IV information from the hospital's Pharmacist



**2**  
(Site Visit) Multi-functional team creates data set with ALARIS Medical Systems



**3**  
(Support provided over the phone) Hospital's Pharmacist refines



**4**  
(Site visit) Meeting held to review data set with multi-functional team

**5**  
Final review of data set and sign off

# Expedite Implementation of New Safety Processes and Technology

The PharmSMART<sup>SM</sup> Consulting Service expedites the implementation of your infusion platform with the Guardrails<sup>®</sup> Safety Software. Through their in-depth knowledge of data set development and project management expertise, the PharmSMART<sup>SM</sup> Consultants will work with your staff to minimize disruptions of the current workload and assist with a peak labor need.

# Train for Ongoing Management

Your PharmSMART<sup>SM</sup> Consultants will help you establish a process for ongoing management of your data set. The use of the Guardrails<sup>®</sup> Continuous Quality Improvement (CQI) Event Tracker will enable you to drive training and processes in your institution to help protect against patient harm.

For more information, contact your ALARIS Medical Systems Sales Consultant at 1-800-482-4822, in Canada 1-800-387-8309, Fax 1-858-458-7760, or visit our web site at [www.alarismed.com](http://www.alarismed.com)

## The ALARIS AEP™ Monitor The input is auditory. The response is immediate.

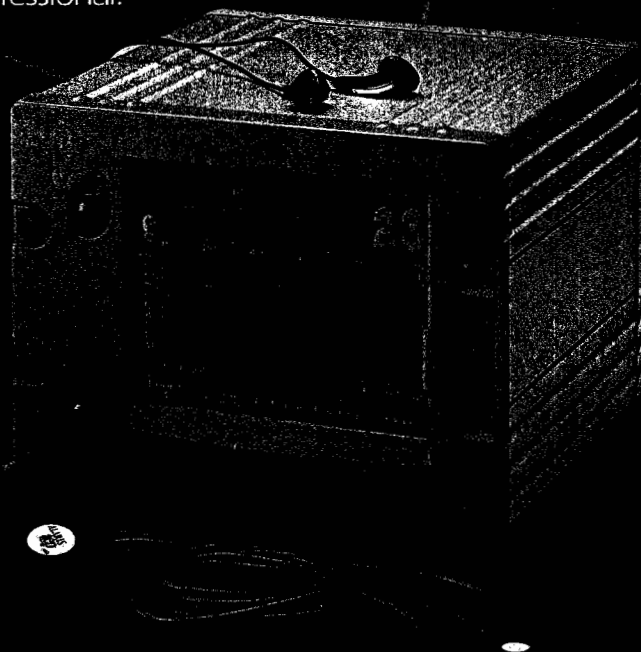
The revolutionary new consciousness-level monitoring device from ALARIS Medical Systems®, the ALARIS AEP™ Monitor is the first and only active input monitor available for use on patients during anesthesia.

uses auditory evoked potentials (AEP) to measure the level of consciousness during general anesthesia and sedation  
provides rapid signal extraction (2 to 6 seconds) based on controlled auditory input to allow near real time measurement of changes in the anesthetic state

noninvasive

faster response than currently available consciousness monitoring technology

The ALARIS AEP™ Monitor represents a milestone in care and safety for the patient and healthcare professional.



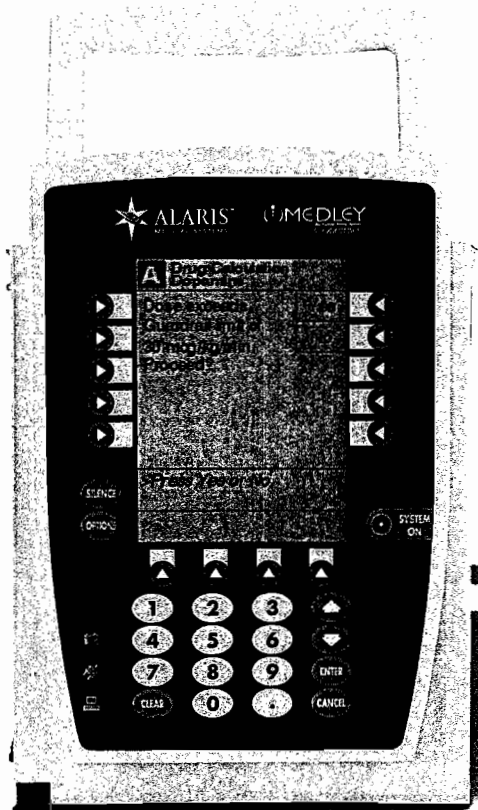


## The Guardrails™ Safety Software

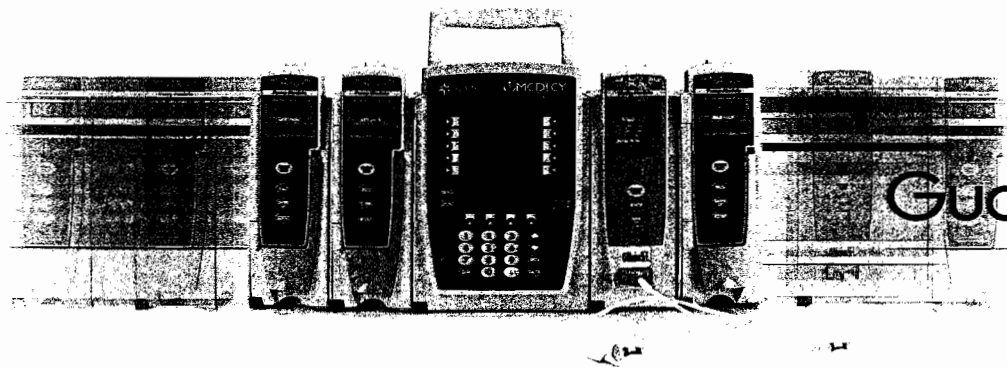
The Guardrails™ Safety Software defines an entirely new product category in patient safety at the point of care. The Guardrails™ Safety Software is medication safety software that reduces medication error right at the critical point of infusion.

### The Guardrails™ Safety Software— Providing Breakthrough Technology to Reduce Patient Harm

From prescription to transcription to preparation, medications are monitored by a variety of safety systems, including physician order entry systems, pharmacy information systems, bar coding, and automated dispensing. But there was no safety system available for the extremely critical point of infusion to prevent IV medication errors—until the Guardrails™ Safety Software.







**Guardrails™**  
Safety Software

## **The Guardrails™ Safety Software's Drug Library and Interactive Menus Help Reduce IV Medication Errors**

The Guardrails™ Safety Software—IV medication error-reduction application designed to alert caregivers when infusion-programming inputs are outside of hospital-defined best practice guidelines. The Guardrails™ Safety Software provides the automatic safety net, helping to protect patients and caregivers against programming and communication errors.

## **The Guardrails™ Safety Software can be programmed to the institution's best practice guidelines**

- complete flexibility in configuring the Profiles™ multiple patient and care area specific options, including:
  - more than 1000 patient care area specific settings and configurable options
  - device option settings
  - drug library entries
  - drug-specific limits
  - customizable channel labels
  - multiple physiologic parameters
  - communication links to other hospital information systems

## **PC-Based IV Medication Error-Reduction Software Provides Flexibility**

- maintain drug library and the Profiles™ settings with easy to use PC-interface
- future enhancements provided through software updates

## **The Guardrails™ Safety Software Event Log Supports Continuous Safety Improvement Initiatives**

- track and document events outside best practice guidelines

## **Passive Design Provides Seamless Integration**

- automatically networks behind the scenes and will alert care-provider only when a limit has been programmed outside the hospital's best practice guidelines requiring no change in workflow

## **Technology Linkage\***

- access to computer systems for POE, MAR, and PIS
- incorporated into multiple ALARIS® infusion and monitoring platforms



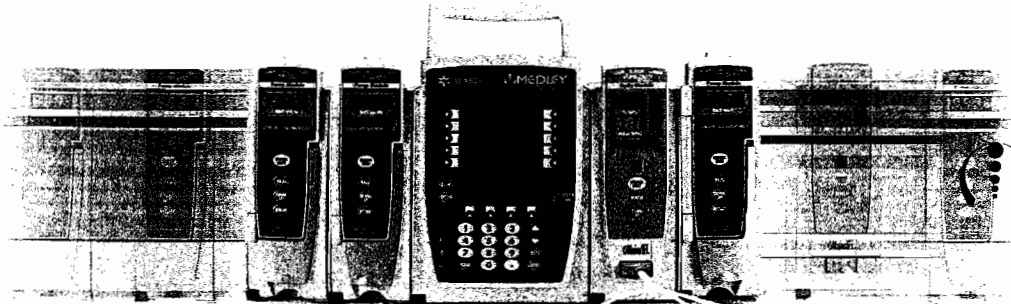
We're in a unique position  
to prevent IV errors.  
Right at the patient's side.

## The MEDLEY™ Medication Safety System with the Guardrails™ Safety Software

The MEDLEY™ Medication Safety System integrates drug infusion, patient monitoring, and documentation in one modular, easy-to-use platform at the patient's bedside. The MEDLEY™ Medication Safety System is an ever-expanding family of modular infusion and monitoring units, providing multiple benefits to caregivers:

- helps protect against patient harm
- one simple system to learn
- common user interface reduces programming complexity
- backlit screen and keypad result in easy reading and improved safety
- enables caregivers to build the optimal platform for specific patients





**MEDLEY**  
Medication Safety System  
Guardrails

The MEDLEY™  
Medication Safety System

## The MEDLEY™ Medication Safety System Provides Maximum Flexibility and Ease-of-Use

### Programming Module

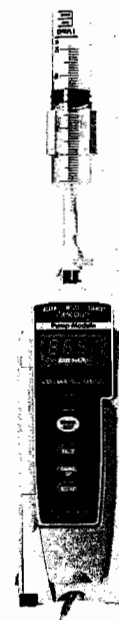
- the Guardrails™ Safety Software
- flash technology for easy software upgrades
- common user interface reducing complexity
- supports multiple combinations of up to 4 modules
- backlit screen and keypad for easy reading and improved safety
- single power cord and battery

### Pump Module

- smooth resolution of flow
- unique lighthouse indicators for displaying pumping status
- small and lightweight for flexibility in use
- CE credited computer-based training for enhanced learning

### SpO<sub>2</sub> Module

- common user interface reducing complexity
- Masimo SET® Technology
- CE credited computer-based training for enhanced learning



**More to come from the technology leader in IV medication safety.**

### Specifications

#### Programming Module

Nickel metal hydride battery with run time display

Communication Data Port  
RS232 with a RJ45 connector

Power Requirements  
100-240 V, 50/60 Hz, 150 VA MAX

Dimensions  
6.9" W x 8.8" H x 9" D  
(including pole clamp)

Weight  
7.2 lbs

#### Pump Module

Flow Rate Range  
0.1-999 mL/h

KVO (Keep Vein Open)  
Selection Range  
KVO rate can be set in System  
Configuration from 0.1-20 mL/h  
in 0.1 mL/h increments

Dimensions  
3.3" W x 8.9" H x 5.5" D

Weight  
2.4 lbs

#### SpO<sub>2</sub> Module

Dimensions  
3.3" W x 8.9" H x 5.5" D

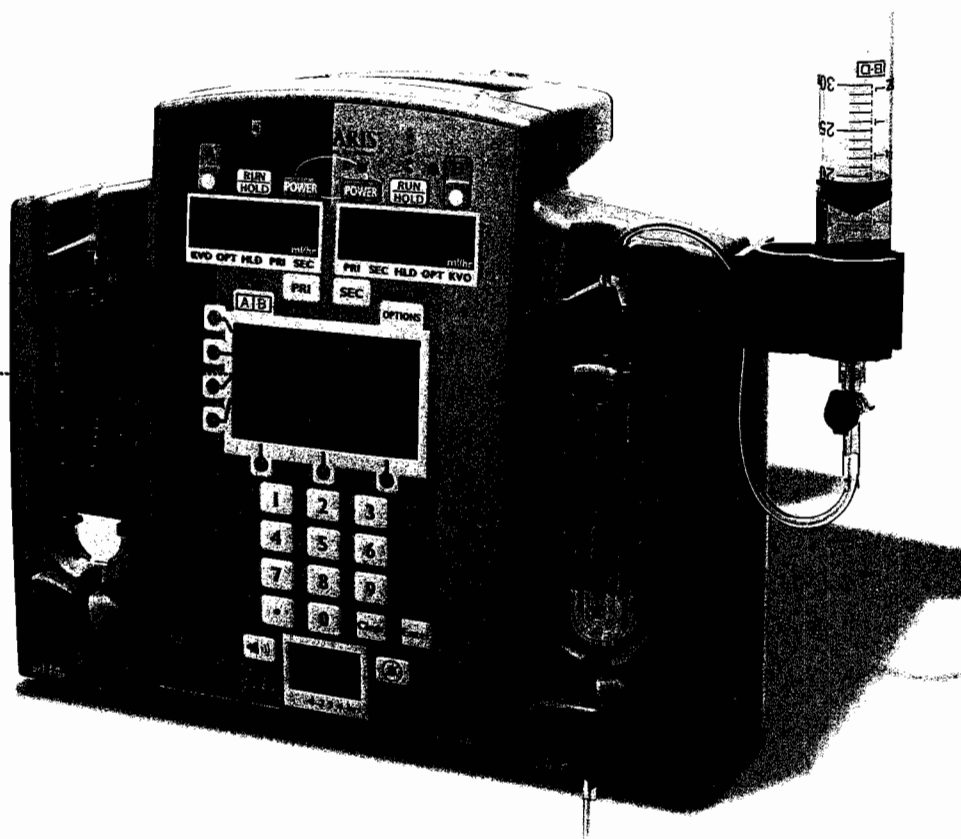
Weight  
2 lbs

Electrical Classification  
Class 1, Internally Powered Equipment,  
Type 8B Defibrillator Proof

Coming  
Soon

The Guardrails™  
Safety Software  
for the  
Signature  
Edition® Infusion  
Pump

Guardrails™  
Safety Software  
Signature  
Edition®

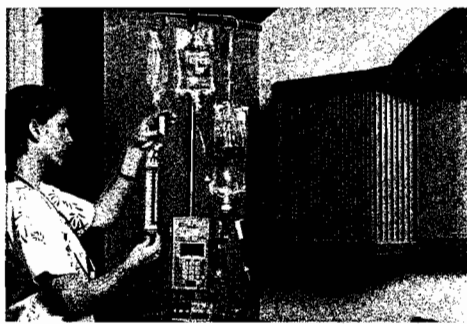


## The Guardrails™ Safety Software for the Signature Edition® Infusion Pump

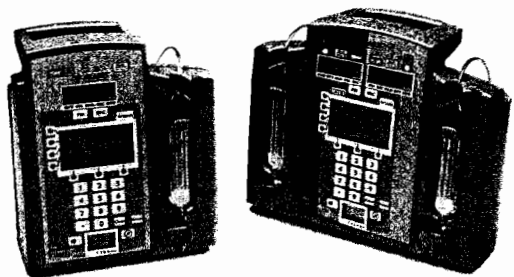
Signature Edition® Single and Dual Fixed-Channel Infusion Pump  
Based on Human Factors Design Principals and the Input of  
Customers, Highly Advanced and Versatile.

**The Guardrails™ Safety Software +  
Advanced Signature Edition® Infusion Pump Features =  
A New Level of IV Medication Safety at the Bedside**

The Guardrails™ Safety Software for the Signature Edition® Infusion Pump  
alerts caregivers when infusion programming inputs are outside



hospital-defined best practice guidelines. The Guardrails™ Safety  
Software provides an automatic safety net helping to protect  
patients and caregivers against IV medication programming  
and communication errors.



## Feature Highlights

- **the Guardrails™ Safety Software** helps build compliance to hospital best practice policies at the bedside, providing a test of reasonableness against caregiver infusion programming inputs to help protect patients from infusion error
- **human factors design** means intuitive design with easy to operate controls to help save operator time and lower the risk of user error
- **patented AccuSlide® Flow Regulator** reduces the risk of free-flow
- **single and dual channel pumps** designed to save nursing and pharmacy time and reduce costs
- **unique precision flow software** for syringe-like continuity at low flow rates
- **administration sets** are available in a wide variety of models designed for use with ALARIS Medical Systems' Signature Edition® Infusion Pumps

## Advanced Feature Highlights

### New!

**patient software** maintains previous patient programming parameters until you change them

- **drug-specific dose rate calculator** allows the clinician to select a drug name (eg, Dopamine) to calculate a volumetric or a dose rate for continuous drug infusions, and is based on parameters such as drug dosage, patient weight, and concentration
- **Dynamic Monitoring® systems** incorporate the exclusive resistance, high resistance and pressure modes, and manual baseline option. With rapid time to alarm, and the ability to filter out infusion artifacts such as flow rate variability and patient motion, the system provides real time intravenous monitoring

## Programmable Features

- optional modes: dose rate calculator, secondary mode, loading dose, multi-dose with delayed start, multi-step
- air-in-line alarm threshold
- air-in-line reset feature
- accumulated air-in-line alarm
- adjustable audio volumes
- audio transition tone
- computer link
- fixed or adjustable pressure, pressure trend graph
- the AutoRestartPlus™ feature
- resistance alert, resistance display, resistance trend graph
- customizable instrument ID label
- KVO flow rate
- maintenance interval
- maintenance reminder
- maximum rate
- panel lock

## Specifications

### Flow Rate Range

0.1 to 999.9 mL/h in 0.1 mL/h increments;  
0.1 — 270 mL/h (secondary)

### Volume to be Infused

0.1 to 9999.9 mL in 0.1 mL increments (primary);  
0.1 to 999.9 mL in 0.1 mL increments (secondary)

### KVO Flow Rate

0.1 to 20.0 mL/h in 0.1 mL/h increments

### Dimensions

Single Channel: 7.6" W x 8.6" H x 5.0" D. Weight 6.6 lbs  
Dual Channel: 10.7" W x 8.6" H x 5.0" D. Weight 8.4 lbs

### Internal Battery

Rechargeable nickel cadmium

### Battery Capacity

Single channel, 4 hours at 100 mL/h: dual channel,  
3 hours at 100 mL/h (sum of channels)

### Recharge Time

95% capacity in 4 hours

### Power Requirements

100-120 V, 0.5 A, 50-60 Hz, 3-wire grounded system  
(40 watts max.)

# The SmartSite® Needle-Free System offers everything your institution needs for needle-free IV safety

## Standardization

Complete system integration includes:

- Gravity Sets (10, 20, and 60 drops)
- Extension Sets
- Drug dispensing devices
- IV pump sets
- Positive bolus valve

## Safety and compliance

Highest level of needle-free compliance (OSHA, JCAHO) with these advantages:

- Passive needle-free system
  - No needles accepted for full compliance
  - Integrated

## Compare the passive SmartSite® needle-free system with active systems

Features & Benefits	SmartSite® needle-free system	Active Systems
No needles accepted	✓	
No extra components for compliance	✓	
No extra steps for compliance	✓	

- MRI safe
- Straight through, nontortuous fluid path
- Latex free
  - High resistance to lipids and alcohol
- Flat, easy-swab surface

# SmartSite®

## Low total-system cost

- No extra caps or cannulas required—integrated valve design
- Integrated needle-free gravity and pump sets
- No extra line items—reduced inventory
- No multiple steps or components—fully passive system

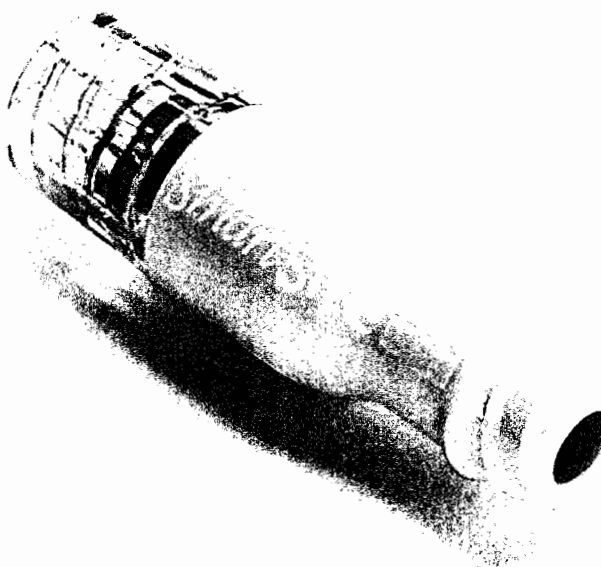
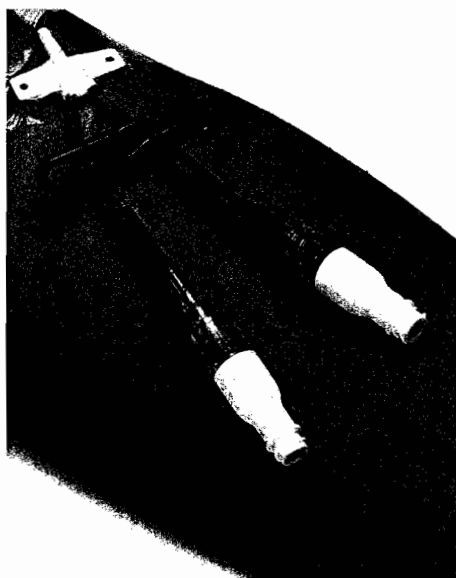
## SmartSite® Plus Needle-Free System with positive bolus—positively better

### Compare SmartSite® Plus with other positive bolus valves

Features and Benefits	SmartSite® Plus needle-free system	Other systems
Contoured shape for patient comfort	✓	
MRI compatible	✓	Contain metal
Straight through, nontortuous fluid path	✓	
Combine with the SmartSite® needle-free valve for complete needle-free system	✓	

## ALARIS Medical Systems®—a leader in reducing harm to patients and caregivers

ALARIS Medical Systems® brings the most advanced thinking and technology to patient safety, yet our basic mission is simple—to protect caregivers, their institutions, and their patients.



# ALARIS Medical Systems® and McKesson Automation

## A Strategic Partnership for Medication Safety

ALARIS Medical Systems® and McKesson Automation have formed an alliance that brings the most advanced thinking and technology to protect caregivers, their institutions, and their patients. The companies' individual strengths make this a powerful partnership to help prevent patient harm.

### ALARIS Medical Systems®

- the Guardrails™ Safety Software
- the MEDLEY™ Medication Safety System
- the Signature Edition™ Infusion Pump
- leader in IV infusion and monitoring platforms

### McKesson Automation

- leader in hospital data management and bar coding technology
- Admin-Rx™ bedside medication scanner
- Connect-Rx™ medication management systems architecture

### Forging a New Future of Harm Prevention

In addition to the breakthrough technologies ALARIS Medical Systems® and McKesson Automation already provide, the companies are working together to develop new products focusing on reducing preventable adverse drug events (PADEs).

These products will concentrate on several key goals:

- reduction of administration errors
- linking intravenous medication orders and the infusion pump
- better patient data management
- cost-effective hardware
- building upon existing base of leading-edge products

### Advancing the Standards of Medication Safety

ALARIS Medical Systems® and McKesson Automation's strategic partnership means more than new products and new solutions. It means that you will be able to provide a higher level of safety and care for your patients.

**McKESSON**  
Empowering Healthcare

For more information, contact your ALARIS Medical Systems® Sales Consultant at 1-800-482-4822, in Canada 1-800-387-8309, Fax 1-858-458-7760, or visit our web site at [www.alarismed.com](http://www.alarismed.com).

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**ALARIS**  
MEDICAL SYSTEMS

1/02 SSM# 1432

# The ALARIS® Center for Medication Safety and Clinical Improvement

## **Committed to Education and Innovation to Reduce Medication Errors**

In light of increased oversight in the realm of healthcare safety, ALARIS Medical Systems® is creating the ALARIS® Center for Medication Safety and Clinical Improvement. The center's purpose is to prepare hospital leadership to respond to the regulatory and market requirements to improve the overall quality of clinical care. The ALARIS® Center provides:

- advanced analysis of systems and procedures for your Medical Safety team
- action plans to improve your medication safety environment quickly and efficiently
- cross-functional interaction to upgrade best practices

## **A Unique Approach to Medication Safety from ALARIS®**

The ALARIS® Center for Medication Safety and Clinical Improvement is another example of ALARIS Medical Systems' leadership position in the field of patient and caregiver harm prevention.

## Bringing a new level of safety to patient care



- Software for IV medication error prevention
- Helps protect against harm at the point of infusion delivery
- Promotes best practice guidelines; customized for each care area of the hospital
- Provides Continuous Quality Improvement (CQI) data
- Compatible with Signature Edition<sup>®</sup> GOLD System for enhanced safety without additional equipment purchases
- Enhanced device features



# A medication error process improvement solution



## Guardrails® Event (11/21/2001)

4:38 AM Insulin, regular (100u / 100mL)  
 Programmed Dose = 7 unit/kg/hr  
**Dose Above Maximum Limit:**  
 Maximum Limit = 0.1 unit/kg/hr  
**Soft Guardrail Warning:**  
 Response = No (Do Not Proceed)

- 1 Multi-disciplinary team creates hospital best practice guidelines
- 2 Pharmacist provides oversight to "Data Set"
- 3 Data set loaded into infusion device from a PC
- 4 Caregiver alerted when IV programming is outside best practices
- 5 Guardrails® CQI Event Tracker records near misses and subsequent programming

No change in practice at the point of care

## Bringing safety to every care area



**Hospital Profiles (examples)**  
 PICU  
 MED/SURG  
 ICU  
 NICU (<2kg)  
 NICU (>2kg)  
 Labor and Delivery  
 Surgery  
 Oncology  
 ER  
 Burn Unit

ICU		
MED/SURG		
PICU		
QC Setup	40mg/7.5mL	
QC Setup	200mg/7.5mL	
...	...	...
Dose	Min	Max
---	---	---
---	---	---
---	---	---

- 1 Multi-disciplinary team defines up to 10 profile options specific to patient or care areas
  - 2 Profile drug list and instrument configurations are customized with the Guardrails® Editor
- Within each profile option:
- up to 100 drugs can be customized
  - up to 1,000 unique drug setups can be defined

## Flexibility to set practice guidelines

### Guardrails® Soft Limits (ICU Profile)

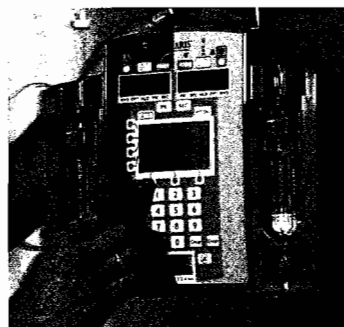


Helps prevent errors on critical drugs and provides clinician flexibility

### Guardrails® Hard Limits (Med/Surg Profile)



Helps prevent errors on critical drugs



# Guardrails® CQI Event Tracker: A unique quality assurance tool

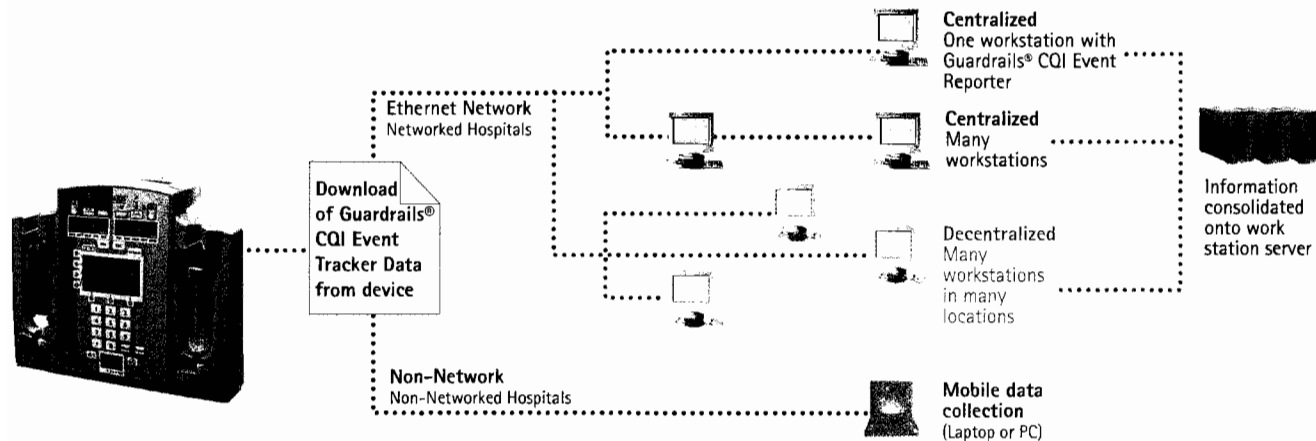
**Captures Guardrails® Events, including maximum and minimum hard and soft limit warnings, Guardrails® Soft Limit overrides and reprogramming when limit is not overridden.**

**Additional data captured includes:**

- 1 **Current profile**
- 2 **Alert type (dose limit, maximum rate or weight)**
- 3 **Attempted infusion parameters**
- 4 **Subsequent programming (after alert)**
- 5 **Total infusion starts and Guardrails® Drug Library starts**
- 6 **Total number of events and overrides**

## How is the data captured?

The network infrastructure at the individual hospital determines the download process used. Hospitals with a network can download data from one workstation or many workstations placed anywhere in the hospital. For non-networked hospitals, a laptop or PC can be used for downloading as well as reporting of the CQI data.



## How much data can the Guardrails® CQI Event Tracker hold?

Each infusion device can capture up to 300 Guardrails® Events including subsequent programming data for each event. All Guardrails® Events can be downloaded for reporting and review.

## How often do I need to download the data?

Data may be downloaded on demand, however, most hospitals choose a scheduled timeframe, such as quarterly, semi-annually, or during periodic maintenance.